

U.S. Department of the Interior · National Park Service · Cultural Resources · Archeological Assistance Division ·

NATIONAL PARK SERVICE ARCHEOLOGICAL ASSISTANCE DIVISION

CRM in NORTHERN IRELAND

By Veletta Canouts

In order to promote United States involvement in archeological studies in Northern Ireland, the British Council, an independent, non-political organization that seeks to promote cultural, educational, and technical cooperation between Britain and other countries, in conjunction with Queen's University in Belfast and the Ulster Museum, sponsored a visit by 10 U.S. archeologists and historians to Northern Ireland, July 16-26, 1989. Led by Dr. James Mallory of Queen's University and Richard Warner of the Ulster Museum, Drs. Alison Brooks (George Washington University), Veletta Canouts (National Park Service), Robert M. Ehrenreich (National Materials Advisory Board, National Academy of Sciences), Robert Evans (George Washington University), Robert N. Lynch (University of Rhode Island) Marjory McIntosh (University of Colorado), James A. Moore (Queens College in New York), J. Daniel Rogers (Smithsonian Institution), Eugene L. Sterud (American Anthropological Association), and John E. Yellen (National Science Foundation) visited a number of archeological sites, toured facilities, and discussed the current status of Northern Ireland archeology with leading experts.

The exchange of information demonstrated the similarities in preservation issues facing cultural resource managers worldwide and emphasized the opportunities available for cooperative research, for example, crosscultural comparisons in dendrochronological dating or English colonization.

The Department of the Environment is presently excavating an English colonial company plantation and town, Balaghy Bawn or Vintnerstown, preparatory to building an

NATIONAL PARK SERVICE
OFFICE of INTERNATIONAL AFFAIRS

NATIONAL PARK SERVICE COOPERATION in INDIA

By Ronald W. Cooksy and Barbara Goodman

The Office of International Affairs of the National Park Service (NPS) is the servicewide focal point for activities with other nations and international organizations. Each year more than 200 requests are received from foreign governments for assistance on natural and cultural heritage issues. The NPS responds by providing information and technical assistance to foreign government officials both in the United States and in their own countries. Requests for assistance cover the wide range of NPS capabilities and include, but are not limited to, planning, interpretation, training, historic preservation, tourism, and natural and cultural resource management.

From these generally broad requests specific projects are designed and the NPS identifies an appropriate individual or team to respond. Individuals and teams are selected from the International Skills Roster. With few exceptions, no employee travels internationally on official business without first submitting a skills roster form.

The NPS cooperation with India is one example of its strong international component. This component exists primarily as a result of the highly regarded reputation of the U.S. National Park Service in the worldwide conservation community. The NPS also has a legislative mandate to cooperate internationally on natural and cultural heritage conservation, education, and management.

The NPS and the Indian Government have been cooperating since 1978 on projects to share information and expertise. In 1989 a Memorandum of Understanding between NPS and the Indian Department of Tourism was signed to

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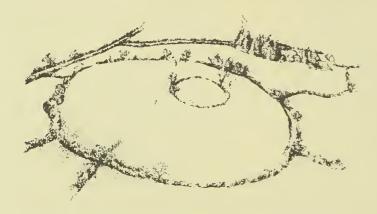


Illustration of Naven Fort. (Reproduced with permission from Her Majesty's Stationary Office, through Dr. Ann Hamlin, Historic Monuments and Building Branch, Conservation Service, Department of the Environment.)

interpretive and meeting center. Dr. Brannon, who is in charge of the excavation, is interested in tracing similarities of English colonial enterprises in different parts of the world, including North America, in the 17th century. Brannon was joined for two field seasons by Orloff Miller from the University of Pennsylvania Museum, who is excavating the adjacent company plantation site of Salterstown.

One of the most recent and successful preservation efforts involved the site of Navan Fort, the ancient capital of Ulster (Emain Macha). Navan Fort, which is a large circular earthwork covering approximately 12 acres in County Armagh, Northern Ireland, is very old. The earthwork covers enclosed structures dating to the Late Bronze Age, around 700 B.C. Abandoned in the 4th or 5th centuries A.D., the site was reused in the 14th century. In the 1970s



View of limestone quary from Naven Fort. (Photo courtesy of Robert Ehrenreich)

commercial quarrying of the limestone that underlies the area progressed so far that the integrity of Navan Fort was threatened. In 1986, after a public inquiry was held, permission to extend quarrying operations was denied, as there was heightened public concern about one of Ulster's most notable archeological sites. Preservation of Navan Fort is under the Department of the Environment. The Historic Monuments and Buildings Branch is its administrative branch, and the Archaeological Survey (Survey) is responsible for the systematic survey of archeological sites in the counties and for rescue excavations.

The Survey has recorded in excess of 13,000 sites, and all are listed in the *Northern Ireland Sites and Monuments Record*. Recent efforts to begin recording industrial sites, such as mills and shipyards that document Belfast's role in the Industrial Revolution, will undoubtedly double that number. About 3,000 of these sites are well-preserved. Some of the more important sites have visitor centers and guides, but the majority are simply signed for visitors.

Until now there has been little vandalism, but as travel to the country becomes easier for urban residents, the sites will undoubtedly become more vulnerable to inadvertent and even intentional disturbances. The Department of the Environment has published a number of attractive and readable brochures about the need to record, preserve, and care for archeological sites. Archeologists are also working with the Planning Service in the Department of the Environment to apply principles of land use that will help preserve the historic landscapes.

This article was prepared from a longer report submitted to the International Affairs Office of the National Park Service. For further information about the report, contact Dr. Veletta Canouts, Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; telephone (202) 343-4101.

For more information about the organization of government archeology in Northern Ireland, contact Dr. Ann Hamlin, Principal Inspector, Conservation Service, Historic Monuments and Buildings Branch, 66 Balmoral Ave., Belfast BT9 6NY, Northern Ireland. A Navan Research Group has been formed to continue work on the Navan Fort.

Individuals interested in more information about Navan Fort, or other earthwork sites in Northern Ireland, can contact **Dr. James Mallory, Emania, Department** of **Archaeology, Queen's University**, **Belfast BT7 1NN, Northern Ireland**. Sandra Stevenson (Northern Ireland) and Carmel McGill (United States) organized the study tour for the British Council.

REPORT

NPS COOPERATION in INDIA (Continued from page 1)



Nalanda University archeologicai ruins, Bihar, India. (Photos National Park Service)

guide cooperation in heritage site conservation and management.

Since that time several heritage site planning activities have begun. Recent projects have addressed significant archeological sites and monuments. In close cooperation with the Archaeological Survey of India and other Indian counterparts, NPS planning teams have prepared development concept plans for the trio of World Heritage Sites, the Taj Mahal, Agra Fort, and Fatehpur Sikri, in Agra and four sites of particular significance for the followers of Buddha, Bodhgaya, Rajgir, Nalanda, and Sarnath.

The Archaeological Survey of India (Survey) has been and is essentially an academic institution dedicated to the excavation and maintenance of some of the most outstanding cultural heritage sites in the world. It has had little interest in managing those sites for tourism.

The Nalanda archeological site in the State of Bihar, India, is a prime example of the resources managed and main-

tained by the Survey. It also is a prime example of difficulties and frustrations encountered by the Survey in attempting to serve two masters, conservation of cultural heritage and tourism.

The University of Nalanda is one of the major archeological sites in India. From about the 5th or 6th century A.D. until about the 12th century, Nalanda was the site of one of the most important and best known of the Buddhist universities existing on the Indian subcontinent. Only a portion of the site has been excavated, but row upon row of tiny brick cubicles, large open spaces for lectures, and small private places for worship are clearly visible. One of the more recent excavations has unearthed the remains of a gigantic, standing Buddha. From the size of the remnants, it is estimated that the statue was nearly 80 feet tall.

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The site possesses great physical integrity, both in the structures that have been excavated and the great potential to develop additional knowledge from the unexplored archeological remains.

The cultural resources at the site are spread over approximatively one square mile. The ruins have been stabilized. Other areas have been excavated, surveyed and reburied to protect them from vandals, in which category the Survey occasionally puts tourists. A vast majority of the site has been neither excavated nor surveyed. In fact, the extent of the archeological area of the university has not been defined with precision.

The Survey is extremely limited in its ability to display and interpret artifacts from the site. In the first place, many of the more outstanding pieces uncovered at the site were carried to England. Others have been placed in major Indian Museums in Patna. Calcutta. and Delhi. The museum at Nalanda is small, poorly lit, and does not provide environmentally stable conditions housing artifacts. It is estimated that

approximatively 2 percent of the collection remaining in Nalanda is displayed.

A major goal of the NPS effort in India is to assist the Survey in developing interpretive materials and programs by which to make its efforts more meaningful and educational to both domestic and international visitors. Hopefully, the mutual efforts of the NPS and the Survey will help

those visitors put individual monuments and sites into broader contexts. For instance, although the Taj Mahal could stand by itself and be admired in almost any environment, it takes on much more significance when placed in the context of the Agra Red Fort and Fatehpur Sikri, both World Heritage Sites in their own right, Akbar's Tomb at Sikandra, Itmad-ud-Daulha, and other monuments of the mughal period near Agra. The same will be true if tourists are able to place Nalanda into a context that includes Bodhgaya, Rajgir, Vaishali, and others of the important Buddhist sites.

While NPS assistance has been requested from the tourism sector, concern for site protection, integrity, and overall preservation is addressed in all documents. The need for public awareness, education, and interpretation

is also specifically addressed. Most of the projects in India are made up of several phases. The first document provides a general concept and overview thus allowing the Government of India to focus subsequent activity as desired.

Some of the other countries the NPS cooperates with include Canada, Mexico, Soviet Union, Thailand, Japan, Pakistan, island nations of the Caribbean, China, United Kingdom, Poland, and Spain. Details of these and

Poland, and Spain.

Details of these and other NPS projects are available from the Office of International Affairs.

national Affairs.

For information about the Office of International Affairs, the Office's Monthly Bulletin, Project Documents, or the International Skills Roster, contact National Park Service, Office of International Affairs, P.O. Box 37127, Washington, DC 20013-7127; telephone (202) 343-7063, FTS 343-7063.



University ruins. Archeological site in Nalanda, Bihar, India.

NATIONAL PARK SERVICE WESTERN REGION

WESTERN REGIONAL OFFICE HOSTS 8TH ANNUAL HISTORIC PRESERVATION MEETING

The Freely Associated States of Micronesia (FAS) comprises the Republic of Belau, Republic of the Marshall Islands, and Federated States of Micronesia, including Kosrae, Pohnpei, Chuuk, and Yap. The U.S. Historic Preservation Fund has been extended to these governments to maintain preservation offices and programs for 15 years from the signing of compacts of free association that concluded the World War II trusteeship of these island groups. During this transitional period, 1986-2001, the National Park Service (NPS) is working with these new governments to develop historic preservation programs.

The Western Regional Office (WRO) of NPS meets annually in San Francisco with Historic Preservation Officers (HPOs) and other FAS staff members to discuss the current program direction, review activities, and plan for the future. The meeting also provides opportunities for training courses, lectures, field trips, and staff communication not usually available.

This year's San Francisco meeting was held March 12-13 at the new Regional Office at 600 Harrison Street with Leo Barker, Interagency Archeological Services Branch, and Paula Falk-Creech, Preservation Assistance Branch, as co-chairs. FAS representatives included: Teddy John, Federated States of Micronesia HPO; Vicki Kanai, Republic of Belau HPO; Carmen Bigler, Secretary of the Interior and HPO for the Republic of the Marshall Islands; and Dirk Spenneman, archeologist for the Marshall Islands HPO.

Key historic preservation program items discussed were major problems with Federal agency compliance with Section 106 in Micronesia, the development of a program review and technical assistance structure for the 1991 WRO visit to each government, and approaches to the training of paraprofessional archeologists in Micronesian preservation offices.

A one-day WRO historic preservation training program began with an introduction to conservation principles and review of the Micronesian collections currently curated at the Lowie Museum of Anthropology in Berkeley, CA, followed by field visits to Rancho Olompali State Historic Park at Novato, and Kule Loklo, a reconstructed Coast Miwok Village at Point Reyes National Seashore, to view specialized interpretations of history and native culture, ethnography, and archeology.

ARGENTINA

STUDY and PROTECTION of ARCHEOLOGICAL RESOURCES of NORTHWEST ARGENTINA

By Victor A. Núñez Reguerio

The Institute of Archaeology of Argentina's Tucuman National University was founded in 1986, modeled on the scientific tradition of the former Institute of Ethnology founded by Alfred Metraux in 1928.

The goal of the main archeological project of the Institute is to study the historic and cultural development of northwest Argentina, evaluating the role played by interaction between the populations of the highlands and the lowlands. Chronologically this study ranges from the Preceramic to the Spanish-Native Period.

Changes over time are examined within geographical and ecological frames of the archeological record, including paleoclimatic and environmental variations. The project is focused on archeological and ethnohistorical studies of specific zones and problems and related considerations of the impact of archeological activities upon the communities in which they take place.

The protection of prehistoric and historic archeological resources also has been considered a fundamental goal of this program. Resource protection strategies include developing regional museums and archeological reserves. Further action plans involve the use of archeological resources to promote cultural tourism and a teacher education program. Students working toward careers as archeologists are active participants in the project, receiving training in current research techniques, resource protection, and museology.

Studies of the archeology of the Lerma Valley, the transition from the Formative to the Regional Integration Period, and historical relationships between the Quilmes and the Ibatin people during the Spanish-Native Period are among the projects's current undertakings. The dynamics of interaction between various other populations and traditions are also under investigation. The Preceramic Period in the Santa Maria Valley is being surveyed, and the biological characteristics of populations through skeletal remains are being studied.

Reports on the Institute's Archaeological Resources of Northwest Argentina Project will be published in the

UNITED KINGDOM

HERITAGE MANAGEMENT in the UNITED KINGDOM

By Peter Fowler



A general view of the Bank of England. (Photos courtesy of the British Embassy.)

The institute of Field Archaeologists of the United Kingdom recently formed a Cultural Resource Management (CRM) Special Study Group. This indicates professional preference for cultural resource management as the appropriate description of a field now involving many who are not primarily archeologists and many archeologists who are having to merge their academic knowledge with other disciplines, often in a non-academic context.

While debate continues about the best phrase to use, there has been a relative explosion of higher education provision in CRM in Britain, characteristically using the word "heritage" rather than the phrase "cultural resource." This reflects the growth of what has been described as "the heritage industry" rather than any deeply argued philosophic consideration of what "heritage" is, and the appearance, indeed creation, in the public sector of posts in "heritage" management using the word in an adjectival sense.

United Kingdom universities offering formal postgraduate courses in this field now include Cambridge, Edinburgh,

Newcastle upon Tyne, and York. In Ireland similar provision also is offered at University College in Cork. Other institutes of higher education likewise in the same field include Bournemouth Polytechnic, the Ironbridge Institute, in conjunction with Birmingham University, and St. Mary's College, Strawberry Hill, and Twickenham, with Surrey University. In addition various institutions, ranging from several universities, such as Durham, to education centers such as Losehill Hall in the Peak National Park, provide a variety of ad hoc short courses.

The course titles themselves suggest at least different emphases, and possibly also hint at some confusion in professional and educational circles as to what is needed in "the real world" and, therefore, what should be taught at postgraduate level. Cork's new 1-year course leads to a diploma in Irish Heritage Management. Cambridge calls a new course "Archaeological Heritage and Museum." Since 1989 Edinburgh has offered a 1-year Master of Science in CRM. Newcastle's Masters course, "Heritage and Society," runs in parallel with a Heritage Workshop during which academics and professionals in the regional heritage business meet for seminars and symposia. York has titled its new Master's course "Archaeological Heritage Management." Ironbridge's postgraduate program is called "Heritage Management." The title of Strawberry Hill's 1-year course is "Heritage Interpretation." Bournemouth's new, unique undergraduate course is called "Heritage Conservation."

Of the short courses, two examples indicate the range. Durham's Heritage Training Unit provides for the unemployed an 8-week course called "Field Monument Identification: Protection and Management." Losehill's "hobby" courses, open to all in 1990, included a weekend on Historic Landscapes, described as an introduction to the identification, conservation, and management of Peak District historic landscapes.

Postgraduate programs show a remarkable homogeneity in their content. Those elements appear to be seven: principles and theory of conservation; practice of conservation planning; nature of the cultural/archeological resources; issues and skills in communication, interpretation and presentation; relevant legislation; management theory/principles; field/facilities visits; and a project. Most of the courses examined have five or more of those elements, but equally, all have other specialized elements.



Covent Garden Market in London.

The Cork course, for example, funded under the Advanced Technical Skills Programme funded by the European Social Fund of the European Community, is "initiative in co-operation with agencies already actively involved in heritage and tourism." It is linked to the premise that "tourism is widely recognized as a key element in the Irish economy." Similarly the Strawberry Hill course, "is designed to prepare people to work as interpreters in museums, heritage organizations and tourism" and places an emphasis on management and marketing. Edinburgh, playing to its university strengths, emphasizes town and country planning, historic buildings and Art History, while York stresses architectural conservation and its practical archeological experience. Newcastle upon Tyne, playing to strengths in a department that runs four public museums and has staff with a variety of relevant experience, uses a range of resources in the region to illustrate issues, practical and intellectual, while trying to set "heritage" very much in global, philosophic context without claiming to "train" managers.

Some significant omissions in what is now offered in the United Kingdom can be noted. No course specifies the encouragement and use of volunteers.

Few syllabi stress teamwork and collaboration, the management of staff, database management, fund raising, land or estate management, planning law and practice, or public relations. Only one or two, overtly link their content to scientific principles in general. There is also a need to incorporate archeology into other programs concerned with conservation and enhancement of the environment.

June 1991

This primarily signals that, quite suddenly, higher education in heritage management has emerged in the United Kingdom and Ireland. Unasked is the question of whether such provision is pertinent to the needs of those individuals looking for careers in "heritage management" or of their prospective employers. Nor does it pose the question of whether current heritage education meets the even more important requirements of the resource itself, all too characteristically struggling to survive in a hostile late 20th century environment.

For more information about heritage management in the United Kingdom, contact Peter Fowler, Professor of Archaeology, Department of Archaeology, University of Newcastle upon Tyne, Newcastle, NEI 7RU, UK.

BERN

The ARCHEOLOGY PROGRAM of the BERMUDA MARITIME MUSEUM

By Emma Titford and J.C. Amell

The Bermuda Maritime Museum opened in 1975 in the Keep of the former Royal Naval Dockyard on Ireland Island. The Keep, which had been unoccupied for some years, contained a group of mid-19th-century buildings, which had been constructed out of locally quarried limestone by British convicts. Several of them were museum pieces in themselves and thus were seen as the ideal setting for Bermuda's first major museum to be devoted to its maritime heritage.

The entire Keep had been vandalized and was a picture of devastation. Apart from a special effort to prepare a single exhibition hall, for the first few years all work was devoted to restoring the major buildings and grounds for use and to provide access for the public. At the same time, donations of artifacts of all kinds reached the Museum, requiring proper recording and documentation. Lacking funds for other than minimum staff, all the work of these early years was done by Museum Association volunteers. It was recognized that much of Bermuda's heritage lay in the hundreds of shipwrecks from the 16th century to the present lying on the extensive and treacherous reefs surrounding the island. This was emphasized by the number of artifacts given to the Museum that had been taken from wrecks by amateur divers and others and which, all too often, had received inadequate or no conservation.

Marine Archeology. A marine archeology program was initiated by several amateur divers and conservation volunteers by obtaining a license to excavate a historic wreck. Little came of this first effort, largely because of a lack of both funds and trained staff. In 1983 an archeological team from East Carolina University (ECU) joined the Museum staff to provide a field school for some of its students. They studied the wreck of a Confederate blockade runner, which had foundered off the south shore of the island. That same year the first professional marine archeologist and conservator joined the staff.

With this support investigations took on a new pace and professionalism. Study centered initially on the



View of the grounds of the Bermuda Maritime Museum ioc

re-examination of known early wrecks. The first of these, the San Pedro, had been discovered in 1950 by two local divers who were drawn to the area after recognizing two cast iron cannon on the seabed. Their curiosity led to the discovery of a number of varied and interesting artifacts of the 16th century. When Museum staff and volunteers relocated and examined the site no timbers remained, but the artifact collection, now housed in the Museum, has proved an interesting source of study.

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k rth. (Photos courtesy of the Bermuda Maritime Museum)

During the following summer work began in earnest on another wreck site previously dated to the late 16th century. Originally salvaged in the 1960s, this wreck yielded substantial hull remains and literally thousands of artifacts ranging from potsherds to concreted lumps of iron ship fastenings. The hull was recorded in detail using standard archeological procedures, and a photo-mosaic was compiled to assist in the understanding of construction techniques. Study continues, not the least on the artifacts, which have now undergone conservation treatment. Preliminary inferences suggest that the ship might be of a slightly later

date than hitherto thought and possibly of Dutch rather than Spanish origin.

Late in 1988, with the help of students and staff from the ECU field school, another smaller 16th-century wreck was located on the western reefs. It was subsequently discovered that this wreck was licensed to a local diver who had been working the area intermittently over a number of years. However, with his cooperation the Museum has been able to excavate, map, and photograph the hull remains. The Museum plans to continue the work of disassembly and three-dimensional recording of timbers.

The information found from these practical investigations will culminate in a major exhibit at the Museum in 1992 entitled "Bermuda in the Age of Exploration, 1492-1609," to mark the quincentennial of the discovery of America. This will be enhanced and complemented by archival research. A professional researcher is investigating documentary evidence in the Spanish archives in Seville and Madrid.

Land Archeology. Concurrently with the underwater work, a number of archeological projects on land sites have taken place. These can be separated into two areas of research; the fortifications of Bermuda and the historic town of St. George's at the eastern end of the island. Much of the work on fortifications has taken place in the Dockyard area, which includes the Museum grounds. The first of these excavations, on the site of a moat at the front gate of the Museum, revealed the original footings of the drawbridge and a number of large 19th-century metal-clad wooden channel and mooring buoys. Work on another site revealed part of the original shoreline of the first dockyard, near the Great Eastern Storehouse. An excavation just to the north of this building exposed a buried ship alluded to in several local histories of the Dockyard. Investigations have also begun on the rampart bastions within the Museum grounds, with the two-fold purpose of finding information about their earlier periods of use and to provide eventual exhibit areas for period cannon. Outside the Dockyard area excavations have taken place on Fort Scaur, with the Department of Agriculture and Fisheries, at West Elbow Bay, one of the earliest of Bermuda's small forts, and at Alexandra Battery on St. George's Island.

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The work in St. George's has been undertaken under the auspices of the Bermuda National Trust and experts from the Colonial Williamsburg Foundation, who are conducting a comparative study of lifestyles of two 18th-century brothers, Henry Tucker of St. George's, and St. George Tucker, a prominent citizen of Williamsburg, VA.

Conservation. Conservation is a vital part of any archeological excavation, and for many years a makeshift conservation workshop was in operation inside the Museum grounds. Although these facilities were adequate, the production rate and quality of conservation work was limited. However, in 1988 Corange Limited, a German pharmaceutical company with offices in Bermuda, provided funds for the construction of an artifact conservation laboratory. The resulting two-story building, with the top floor designed for offices, drafting, and store rooms, became operational at the beginning of 1990. The Museum has since been able to improve its standards and

increase its capacity for conservation work. Research will be done through a \$500,000 grant from the Bermuda Government.

Volunteers. The Museum can boast a workforce of local and international volunteers who have helped in many projects. They represent no less than seven countries: Bermuda, United States, Great Britain, Canada, Spain, Germany, and Switzerland. As well as its own projects, the Museum has hosted a number of international field schools and research assignments. Graduate students from ECU have held a field school in Bermuda for the past several years. In addition to their work on 16th-century wrecks, the ECU teams have surveyed and recorded two Civil War confederate paddle steamers, the Maria Celestia and the Nola, wrecked off the southern and northern shores respectively.

Another successful cooperative venture has been with Earthwatch teams organized through Brown University. Earthwatch worked with the Museum from 1986 to 1988, and has provided assistance for land as well as underwater



Members of the EARTHWATCH team survey the coral-covered hull of the Vixen.

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A student from East Carolina University uses drawing grids to map a 16th-century shipwreck.

projects. In April 1989 a team of archeologically trained divers from Canada assisted the Museum in a site survey of a 16th-century ship.

Education and Training. The Museum recognizes its responsibility in the area of education and training. Apart from training its own volunteers, the Museum has provided training workshops in land archeology and conservation techniques for adult volunteers of various backgrounds and interests. Some volunteers included groups from the U.S. Naval base in Bermuda and Bermuda National Trust Archaeology. For many of its projects, the Museum brings in overseas scholars, and the opportunity is not missed to hold public lectures with these experts. Tours and visits have been arranged for local schools, with students of all ages given a chance to handle rare objects and see for themselves the process of conservation.

<u>Publications</u>. By 1983 sufficient work was being done in the archeological field to justify publishing a semi-annual newsletter. This was combined in 1988 with the Museum's newsletter into a more substantial illustrated publication published four times a year, the <u>Quarterly</u>.

It also was decided to publish an academic journal to record original work in the many aspects of Bermuda's maritime history. Two volumes of the new <u>Bermuda Journal of Archaeology and Maritime History</u> have appeared with articles ranging from translation of a French account of a Spanish prize shipwreck on the Island's reefs to several Museum-sponsored archeological projects.

The Museum has established the Bermuda Maritime Museum Press to re-publish important books and original manuscripts on those aspects of Bermudian history that coincide with the purposes of the Museum. Five titles have been published to date.



Two participants of the Duke of Edinburgh Award Scheme assist in the excavation of West Elbow Bay Fort.



One of the number of portable displays that are used in lectures and educational tours.

For more information about the archeology program of the Bermuda Maritime Museum, contact Emma Titford, Conservator, Bermuda Maritime Museum, P.O. Box MA 273, Mangrove Bay MABX, Bermuda.

INTERNATIONAL COUNCIL on MONUMENTS and SITES

ICOMOS PROTECTS CULTURAL HERITAGE

By Ricardo Elia

At its October 1990 General Assembly in Lausanne, Switzerland, the International Council on Monuments and Sites (ICOMOS) adopted the <u>Charter for the Protection and Management of the Archaeological Heritage</u>, which had been drafted by the International Committee on Archaeological Heritage Management (ICAHM).

Founded in 1964 with the support of UNESCO, ICOMOS is an international non-governmental organization consisting of an Executive Committee, a Secretariat located in Paris, and a membership organized in national committees. At present there are 59 national committees, including the American committee, US/ICOMOS.

ICOMOS describes its main purpose as "bringing together people and institutions actively concerned with the conservation of buildings, groups of buildings and larger units of architectural, archaeological and historical interest." To serve this purpose, ICOMOS encourages the exchange of ideas, expertise, and training in the fields of conservation and preservation. It also publishes a quarterly journal, ICOMOS Information, which prints articles and notices about international conservation and restoration projects. The membership meets in a General Assembly every three years.

Since its establishment ICOMOS has tended to concern itself primarily with above-ground monuments and architecture. In recent years, however, both the membership and the orientation of ICOMOS have reflected the increasing sophistication of the preservation movement generally, which has been turning away from the study of individual buildings and sites and moving in the direction of a more holistic approach to the preservation of the world's cultural heritage, involving not just individual monuments but groups of monuments together with their cultural, historical, and archeological contexts.

This trend can be seen in the recent creation by ICOMOS of a series of Specialized International Committees to deal

with specific issues and topics relating to preservation. There are at present committees on historic gardens and sites, vernacular architecture, mud brick (adobe), cultural tourism, inventories, photogrammetry, historic towns, stained glass, training, rock art, stone, wood, and, since 1985, archeological heritage management. A number of national committees have created parallel committees.

In 1989 US/ICOMOS established specialized committees on: Historic Gardens and Sites, Nora Mitchell, chair; Historic Towns, Robert E. Stipe, chair; Earthen Architecture, Neville Andrew, chair; Training, James K. Huhta, chair; and Vernacular Architecture, Michael Koop, chair. At its annual meeting in January 1990 US/ICOMOS added two new committees: Archaeological Heritage Management, Ricardo J. Elia, chair; and Cultural Tourism, Sally Oldham, chair. Each committee is charged with two tasks, preparation of a charter defining its purpose and development of a 3-year work program.

One of the most important tasks of the new US/ICOMOS Archaeological Heritage Management Committee will be to coordinate activities with ICAHM and to draft a committee charter consistent with the recently adopted <u>Charter for the Protection and Management of the Archaeological Heritage</u>, which was written in response to the growing threats to archeological resources in the world today. This important document, first presented in draft form at the 1987 ICOMOS General Assembly in Washington and revised in 1988 at a Special Assembly in Stockholm, is intended to serve as a concise statement of general principles and guidelines for the preservation and management of the world's archeological heritage.

The <u>Charter</u> calls for nations to make archeological resources part of their overall land planning process in order to ensure that development does not result in destruction of archeological sites. The adoption of adequate preservation legislation is regarded as critical, both for ensuring that sites are protected and that adequate funding is provided for archeological investigations. Scientific and professional standards are called for in areas of archeological survey, investigations, inventorying, conservation, and the presentation of archeological data. The <u>Charter</u> also

addresses the urgent need to develop international mechanisms for promoting the exchange of information, ideas, and technology among those working in the field of archeological heritage management.

The predominant philosophy of the ICAHM <u>Charter</u> is one of conservation and preservation. The document is, in fact, one of the clearest recent statements of the so-called "conservation ethic" in cultural resource management. Describing archeological heritage as "a fragile and non-renewable cultural resource," the <u>Charter</u> stresses the importance of non-destructive techniques and in situ preservation. The 1987 draft, in fact, went so far as to state that, in essence, only threatened archeological sites should be excavated. The revised draft of the <u>Charter</u>, while still adhering to the principle of in situ preservation, and non-destructive investigations, takes a more moderate position, although the excavation of unthreatened sites is sanctioned only "in exceptional cases."

The ICAHM <u>Charter</u> should provide a useful starting point for many nations, especially those that are struggling with the problems of an ever dwindling archeological heritage in the face of looting, development, and inadequate legislation, funding, and training.

The preservation of the world's archeological heritage is the most important and urgent issue in archeology today. As the preservation movement has grown more sophisticated in recent decades, its practitioners are realizing that ad hoc, piecemeal approaches to preservation and conservation are no longer adequate. True preservation means not just conserving the individual monument or building, whether intact, in ruins, excavated, or unexcavated. It also means the preservation of the landscape around that building, the preservation of the contextual archeological site below that landscape, and the preservation of groups and clusters of buildings, monuments, and sites. It means not only conserving the artifacts that have been excavated from sites, but also the conservation and protection of artifacts that remain in situ.

In short, what is needed is a new, integrated, and systematic approach to the preservation and conservation of the cultural patrimony — not just a collection of individual specialists working on this or that type of artifact or monument, but a unified approach to overall site preservation encompassing every aspect of preservation, protection, and conservation. ICOMOS, with its international membership of architects, preservationists, museum specialists, government agency planners, and, increasingly, archeologists, has an important role to play in this effort.

For information on becoming a member of US/ICOMOS, contact Terry B. Morton, President, US/ICOMOS, 1600 H Street, NW, Washington, DC 20002: telephone 202-842-1866.

QUARTERLY REVIEW SERVES INTERNATIONAL MUSEUM COMMUNITY

<u>Museum</u>, a quarterly publication of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris, has provided an informational forum for the rapidly growing international community of museums in the second half of the 20th century.

An inter-disciplinary publication, <u>Museum</u> regularly covers material of interest to archeologists. Recent issues have looked at the problem of authenticity of African artifacts whose original forms were modified years ago by skilled craftspeople, questions of conservation of objects, the ethical as well as technical dimensions of return and restitution of cultural property to its country of origin, and the educational role of archeologists both inside and outside museum structures.

Other recent editions have carried articles on such diverse topics as educational innovation at the Rio de Janeiro Museum of the Indian, preservation of the cultural heritage of Greenland, and business sponsorship of museums. Local museums in Finland have been featured as well as San Francisco's Exploratorium hands-on museum/science center and the development of a museum at the archeological site at Conimbringa in Portugal. The return of a stone lintel to a temple in Thailand from the Art Institute of Chicago was announced. The magazine monitors efforts to find solutions to the wide range of problems faced by museums as their functions in society evolve.

The first 1991 edition of <u>Museum</u> has "Parks and Gardens of Delight" as its theme. It covers little known but extraordinary spots such as El Retiro Biopark near Malaga in Spain, the Renaissance Monster Park at Bomarzo, Italy, and El Bosque Park in Chapultepec in Mexico City, plus the better known Summer Palace Park in Beijing, Winterthur in Delaware, and formal parks and gardens of Eastern Europe.

Information on ordering subscriptions to <u>Museum</u>, which is now printed in Arabic, Russian, and Spanish in addition to French and English, may be obtained from the UNESCO Press, Sales Division, 7, place de Fontenoy, 75700 Paris, France, or from the national distributors of UNESCO publications. In North America contact Carlton Ray, UNIPUB, Subscriptions Department, 4611-F Assembly Drive, Lanham, MD 20706; telephone (301) 459-7666 or toll free 800-274-4888, in Canada 800-233-0504.

REPORT -



Winonah Warren, a member of the Shinnecock Tribe, represents the Administration for Native Americans by providing advice on how to receive ANA funding for cultural issues. (Photos courtesy of Anthony Shackleford)



Cookie Pratt dressed in traditional Osage dress.

NATIONAL PARK SERVICE

TRIBES PLAN NEW ORGANIZATION at CULTURAL HERITAGE CONFERENCE

More than 160 participants representing more than 50 Tribes attended the Tribal Cultural Heritage/Historic Preservation Conference held at the Osage Reservation in Oklahoma Dec. 4-6, 1990. The intent of the Conference, sporisored by the National Park Service (NPS) Interagency Resources Division, Washington Office, and the Osage Nation, was to build upon January 1990 meetings of Tribal representatives held in Las Vegas, NV, and Washington, DC, that resulted in the NPS Keepers of the Treasures report to Congress.

Representatives from six Federal agencies that supply financial support and technical assistance for cultural heritage programs and projects attended the Conference as advisors. The second day of the meeting was devoted to language preservation issues. A wide range of issues was presented by delegates from the Makah Nation, the Southern Ute Tribe, the Red Lake Band of Chippewa, Mississippi Choctaw, the Osage Nation, and Native Hawaiians. Representatives from the National American Indian Language Institute gave a presentation on using Tribal language codes to preserve these languages. Many others shared their experiences.

Members of the Osage Nation, hosts for the conference, provided a warm welcome with traditional meals and entertainment. Their hospitality was appreciated by all and set a very high standard for the future.

One purpose of the Conference was to discuss the findings and recommendations of the NPS <u>Keepers of the Treasures</u> report sent to Congress by Secretary of the Interior Manuel Lujan, Jr., in September 1990. The report drew on information submitted by Tribal people regarding resources needed to preserve their cultural heritage. Native Americans objected to having people working on these matters called "historic preservation officers" because they felt this bureaucratic term failed to express the importance of such work to Tribal communities.

Ellen Hayes, a Tlingit/Haida woman from Sitka, AK, suggested "keepers of the treasures" as a more descriptive way of characterizing this role in Native American culture. NPS used this suggestion to name its report, which recommended the chartering of a national organization devoted to the promotion and preservation of the cultural heritage of Native Americans. The Tribal Cultural Heritage Conference also adopted "Keepers of the Treasures" as its theme.

As a result of the discussion at this Conference the decision was made to form such an organization. Conference par-



ARCHEOLOGICAL PROTECTION EFFORTS

STUDY of CUMULATIVE IMPACTS of SURFACE MINING on CULTURAL RESOURCES

By Timothy K. Perttula

The Department of Archeological Planning and Review (APR) of the Texas Historical Commission has made an assessment of the méthods currently used by the United States Environmental Protection Agency (EPA) to identify the cumulative impacts of surface lignite coal mining on Texas cultural resources. The study was funded by a grant from EPA.

In assisting EPA to improve its assessments of cumulative cultural resource impacts in National Environmental Policy Act (NEPA) reviews of New Source National Pollution Discharge Elimination Systems (NPDES) permit applications for lignite mines and associated power plants, APR reviewed surface lignite mining activities in Texas and their effects on cultural resources. At the present time there are 22 operating and proposed lignite mines in the State. This evaluation of the approaches and methodologies used by EPA in Region VI was done to determine the relative merits and deficiencies of the EPA approach. Comparison with other Federal agencies that undertake actions in the State such as the U.S. Army Corps of Engineers, Forest Service, Air Force, and Department of Energy also was done to assess cumulative impacts of major Federal actions on cultural resources.

The study included an in-depth review and field investigation of one lignite coal mine in northeastern Texas to ascertain the range of impacts that have occurred, or have the potential to occur during the life of the mine. One means to measure directly the possible cumulative impacts of mining activities on cultural resources, as well as to ascertain changes in land use and historic period structure locations between a mine area and a non-mine area, involved examining a series of 1939-1986 photographs and early 20th-century maps of the 40-square-mile mine area and a non-mine rural area of similar size in the same

county. The review indicated that there have been significant cumulative impacts on cultural resources and historic properties at the mine. This was confirmed at the other Texas mines examined for the study, particularly impacts to historic rural landscape.

These impacts derive primarily from the following factors: (a) the long-term, irretrievable and unavoidable loss of the resource base due to mine construction and operation activities; (b) the occurrence of new developments within the project areas, particularly during the life of the mine, and an inability to ensure that potentially significant cultural resources outside the permit area can be protected; (c) the relocation, moving, dismantling, or disturbance of historic period structures in the mine area before the initiation of a NEPA review or Section 106 consultation; and (d) the potential effect of periodic inundation and lakeshore erosion from fluctuating levels of the power plant cooling pools associated with mines.

APR recommendations to EPA for improving the cumulative impact assessment process and the consideration of cultural resources address regulatory concerns as well as archeological and historical considerations. To summarize, they are as follows:

- (1) Because there is insufficient consideration by Federal and State agencies of the indirect, long-term, and cumulative impacts of their actions on cultural resources and historic properties, EPA should provide guidance to other agencies and applicants for NPDES permits that explicitly defines and provides examples of these types of impacts. This should insure the comprehensive identification of these impacts during the environmental impact assessment process.
- (2) EPA should pursue programmatic directions that recommend incorporating landuse planning efforts as one aspect of mitigation or treatment and address other types of measures that adequately take into account the regional and irreversible impacts of these undertakings on cultural resources.
- (3) EPA should consider the development of a Programmatic Agreement with appropriate Federal and State agencies that addresses the legal responsibilities of each party to insure the protection and preservation of cultural resources, sets forth unambiguous definitions of impacts and areas of potential effect, provides a means to resolve disputes over the application of different agency regulations and guidelines, and addresses mitigation measures keyed to the appropriate regional archeological plan.
- (4) Means should be developed to insure that cultural resources on lands that remain in private hands within a

(Continued on page 23)

PROTECTED BERING STRAIT AREA APPROVED by SOVIET-AMERICAN COMMITTEE

In September 1989 a joint Soviet and American study team conducted an assessment of park or protected sites on the Chukotskiy Peninsula and existing park units and native coastal communities in northwest Alaska. The team's report identifies key areas that show archeological evidence of the migration of people over the prehistoric Bering Strait land bridge, the influences of more recent developments, and common traditions that endure in Beringia.

The team recommended the establishment of an international park embodying an existing national park in the United States and a newly created preservation unit in the Soviet Union to recognize and preserve the common heritage of the area. The recommendation was approved at a January 1990 meeting of the Joint Soviet-American Committee on Cooperation in the Field of Environmental Protection.

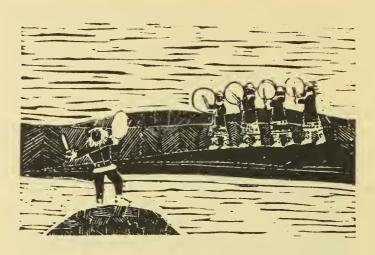
In ancient times the lives of native people, Chukchis and Eskimos, were closely intertwined with the natural world, as hunting, fishing, and gathering plants and berries provided for their subsistence. A growing scarcity of these resources may have prompted the migration across the land bridge from the Asian to the North American continent, though just when is still being studied. People have been in western Beringia for an estimated 30,000 years, but they have lived in eastern Beringia for perhaps approximatively 12,000 years.

Bones of whales, walruses, polar bears, reindeer, and mountain sheep are found in prehistoric Eskimo pithouses. Throughout Beringia marine mammals have been the most important component of the subsistence lifestyle of villagers.

About 3,500 years ago two atypical sites developed on opposite sides of the strait, at Chertov Ovrag on Wrangel Island and at the Old Whaling site on Cape Krusenstern.



Woodcuts reproduced with permission from the Denver Service Center.



These share analogous artifacts not known to any other sites. During the last 2,000 years of prehistory the Bering Strait area was a flourishing cultural center, characterized by stable, shared cultural development.

Preservation of the Beringian heritage, shared by the Soviet Union and the United States, would allow the discovery of new information about the Earth's development as well as insight into the culture of the native people, protection for the great aesthetic beauty of the region, and restoration of traditional cultural and economic links.

Both countries will have to propose and ratify legislation to recognize this joint heritage and to permit cooperative efforts in the future. Joint databases for exchange of information will have to be created, along with effective management structures, and specialists will have to be trained to study common resources.

The study report does not define the boundary of the international park it recommends, but existing national park areas on the Alaska side of the Bering Strait would form the basis of the U.S. designation. On the U.S.S.R. side protected areas would be established according to Soviet laws, policies, and regulations.

Once the international park units are designated, regular meetings should be scheduled to establish programs, such as joint centers for research and information. Other organizations such as the United Nations would be logical partners in supporting the park.

Joint meetings have been held with both Soviets and Americans expressing interest in further cooperation on this important international heritage preservation undertaking.

Copies of the report are available from National Park Service, Denver Service Center, P.O. Box 25287, Denver CO 80225; teiephone (303) 969-2130; FTS 327-2130.

TWO TENNESSEE MEN FINED for DIGGING at PARKIN PARK

Two men from Memphis, TN, were arrested and charged with criminal trespassing when they were caught digging at the State-owned Parkin archeological site in Northeast Arkansas March 16, 1991. Dr. Jeffrey M. Mitchem of the Arkansas Archeological Survey, the archeologist directing research at the site, saw evidence of probing and digging while patrolling the site and contacted the Parkin Police Department. Police Chief Buddy Young and Officer James DeWitt arrested and charged the men, confiscating two shovels, metal probes, and several hand tools. The men paid fines of \$250 each.

The Parkin site, a National Historic Landmark in the new Parkin Archeological State Park, is a Mississippian village surrounded by a moat. It was occupied from approximatively A.D. 1300 until at least the 16th century. Archeologists believe the site was visited by the Hernando de Soto expedition in 1541.

For further information, contact Jeffrey M. Mitchem, State Archeologist, Parkin Archeological State Park, P.O. Box 241, Parkin, AR 72373-0241; telephone (501) 755-2119.

CULTURAL HERITAGE CONFERENCE

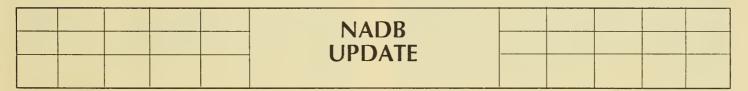
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ticipants established a committee of Tribal representatives nationwide, subject to approval by their Tribal leaders. The committee is chaired by Dr. Michael Pratt of the Osage Nation; its secretary is Mary Proctor of the Cherokee Nation. Administrative support for the committee was offered by the Historic Preservation Department of the Navajo Nation. Pratt will be contacting all those who attended the Conference and others to get their ideas on how to proceed.

The "Keepers of the Treasures" Conference affected those who participated in a very personal way. As one woman wrote afterward, "The experience was so much more than the standard conference. We returned to Lac du Flambeau with the feeling of having been <u>nourished</u> as Indian people."

NPS will continue to cosponsor meetings such as this one and will assist, as appropriate, as the new Native American cultural heritage organization develops.

For further information and copies of the report, contact Patricia Parker, Ph.D., or Emogene Bevitt at Department of the Interior, National Park Service, P.O. Box 37127, Washington, D.C. 20013-1727. Parker's telephone number is (202) 343-9505; Bevitt's is (202) 343-9561.



The Projects portion of the National Archeological Database was designed to provide a database of administrative information for archeological projects. The goals and system design of NADB-Projects were published in the 1988 April issue of the *Federal Archeology Report*, "National Archeological Database--Project Portion: Purpose and Plan" by F. P. McManamon, W. F. Limp, and J. A. Farley. The Arkansas Archeological Survey completed NADB-Projects, Version 1.0 Beta, in June 1989. The program was installed in three governmental offices for field testing in October 1989: (1) Routt National Forest, Steamboat Springs, CO; (2) Bureau of Land Management State Office, Sacramento, CA; and (3) Bureau of Reclamation, Central Arizona Project, Phoenix, AZ.

Reviews and recommendations from the beta test sites were received in January 1990. The reviewers were concerned about the nature of the data categories and their integration for reporting purposes rather than about the mechanics of using the software program. The nature of the reviews reflects more on the design of the system than on the program itself. The problems noted arise from attempting to design and implement a generic project reporting system that articulates easily with administrative operations that are agency specific.

After an evaluation period, the Archeological Assistance Division has decided not to pursue further development of the Projects portion of NADB at this time. Instead, emphasis will be placed on coordinating information requests with Federal agencies' reporting categories.

For further information contact Veletta Canouts, Ph.D., NADB Coordinator, Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; telephone (202) 343 4101.

PAWG NEWS

Recent meetings of the interagency Federal Archeology Public Awareness Working Group (PAWG) in Washington, DC, have focused on the Legacy program of the Department of Defense, the Antiquities Act and ARPA permit records, and the Advisory Council on Historic Preservation's recent activities related to archeology.

On Feb. 4, 1991, Richard Lemaire, Department of Defense (DOD) Office of the Deputy Assistant Secretary for Environment, provided information about the DOD's Legacy Resource Management Program (LRMP). The program was established by Section 8120(a) of the National Defense Appropriations Act of 1990, included an appropriation of \$10 million for Fiscal Year 91, and applies to 25 million Federal acres. LRMP is directed toward the management of significant natural and cultural resources and stewardship of environmental resources (air, water, land).

On April 1, 1991, Francis P. McManamon and Veletta Canouts, National Park Service Archeological Assistance Division (AAD), reported that AAD currently held approximately 75 cubic feet of Antiquities Act and ARPA permits dated from the mid-1960's into the 1980's, when AAD stopped issuing most archeological permits. Landmanaging agencies in particular need to capture key data from these files before they are sent to the National Archives, for compliance with the new curation regulations (36 CFR 79) and the Native American Graves Protection and Repatriation Act (NAGPRA; P.L. 101-601, 25 USC 3000-3013, 18 USC 1170, 104 Stat. 3048). Several PAWG members will compile information about these permit files and any others curated in the Smithsonian Institution's National Anthropological Archives and the National Archives, for discussion at the June PAWG meeting.

The Advisory Council on Historic Preservation announced at the April meeting that it is revising its November 1980 handbook, *Treatment of Archeological Properties*, and that it is developing an Executive Director Memorandum on interim procedures for integrating the Section 106 process with the new NAGPRA provisions.

Ten PAWG member agencies are supporting publication of a book on *Archeological Resource Protection*, the draft of which has been reviewed by those and other agencies, including a Department of Justice attorney and a Tribal representative, and is now heading toward late 1991 publication. The book, by Judge Sherry Hutt, Elwood Jones, and Martin McAllister, includes a discussion of the archeological resource protection problem, provisions of

ARPA and related laws and regulations, archeological crime scene investigation procedures, archeological damage assessment methods, and ARPA case procedures. Copies of the pertinent laws, regulations, and agreements and an extensive glossary will be appended.

PAWG member agencies provide the qualitative and quantitative data that support development of the annual report to Congress on the Federal Archeology Program. Reports on activities for the past four calendar years are currently being prepared by AAD in consultation with PAWG members. In the past few years, PAWG has sponsored the design, production, and public distribution of nearly 2.9 million archeological-theme bookmarks. A PAWG subcommittee is currently developing new bookmark designs and text, and a brochure on "Participate in Archeology," all scheduled for late 1991 release.

As part of Federal archeological public awareness activities, Ruthann Knudson (AAD), Joel Klein (Ebasco Environmental), Judith Bense (University of West Florida), and Veletta Canouts (AAD) will present a forum on "Archeological Resource Management in Concert with NEPA" at the 16th annual conference of the National Association of Environmental Professionals in Baltimore in May 1990.

In the coming months, PAWG members will be compiling a collection of examples of the socioeconomic benefits derived from archeological analysis, to use to support protection programs.

For further information about PAWG, contact Ruthann Knudson, Ph.D., PAWG Coordinator, Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; telephone (202) 343-4119.



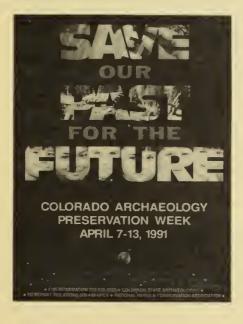
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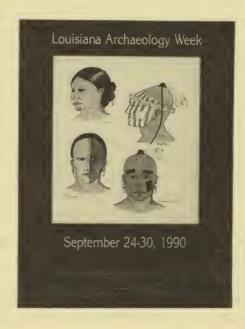
Anuario del Instituto de Arqueologia, Vol. 1, 1991. The project is open to both national and foreign professionals and institutions interested in northwestern Argentina archeology. The Institute of Archaeology invites archeologists and other scholars to submit new projects related to the subject. For further information, contact Prof. Marta R. A. Tartusi, Assistant to the Director, Instituto de Arqueologia, UNT, San Martin 965, 4000 San Miguel de Tucuman, Argentina; telephone (081) 22-3349.

PROMOTING ARCHEOLOGY

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VANDALISM HOTLINE HIGHLIGHTS ARCHAEOLOGY PRESERVATION WEEK

Colorado Archaeology Preservation Week, April 7-13, 1991, featured media events, lectures, educational programs, and other public service programs including a toll-free hotline number, (800) 448-NPCA, established in cooperation with the National Parks Conservation Association for use in reporting vandalism of archeological sites in the State. Programs were coordinated by the Colorado Interagency Anti-Vandalism Task Force represented by the Colorado Historical Society, Colorado Archaeological Society, National Park Service, Bureau of Land Management, Forest Service, Bureau of Reclamation, and the Colorado Council of Professional Archaeologists. For information about Colorado Archaeology Preservation Week, contact Susan Colins, Ph.D, State Archeologist, Colorado Historical Society, 1300 Broadway, Denver, CO 80202-2137; (303) 866-3395.

PUBLIC DISCOVERS ARIZONA'S PAST TIMES

Thousands of people flocked to "Discover Arizona's Past-Times!" during Arizona Archaeology Week March 2-10. This ninth annual celebration featured more than 100 site tours, exhibits, open houses, lectures, and other activities throughout the State. Archaeology Fairs were held in the Phoenix-Tempe area, sponsored by the Southwest Archaeology Team, Salt River Project, Pueblo Grande Museum, City of Phoenix, Desert Botanical Garden, and State Historic Preservation Office, and at the Mesa Southwest Museum, where 25 organizations presented exhibits and demonstrations. For further information about Arizona Archaeology Week, contact Shereen A. Lerner, Ph.D., Chief, Office of Historic Preservation, Arizona State Parks, 800 W. Washington, Suite 415, Phoenix, AZ 85007; telephone; (602) 542-4009.

7,700 ATTEND LOUISIANA'S ARCHAEOLOGY WEEK EVENTS

Some 7,700 persons attended activities in 21 communities during the third annual Louisiana Archaeology Week Sept. 24-30, 1990. Thirty archeologists led activities that included talks on local archeology, demonstrations of Indian crafts and tools, audiovisual programs, demonstrations of archeological techniques and artifact identification, exhibits, and site tours. Archaeology Week programs were funded by the Louisiana Endowment for the Humanities, Kisatchie National Forest, National Park Service, and the State of Louisiana. For further information about Louisiana Archaeology Week, contact Kathleen M. Byrd, State Archeologist, Office of Cultural Development, P.O. Box 44247, Baton Rouge, LA 70804; telephone (504) 343-8200.

8TH ANNUAL HISTORIC PRESERVATION MEETING (Continued from page 5)

The meeting concluded with a review of recent education, training, and tourism videos, "Yesterday and Tomorrow," an introduction to Micronesian historic preservation, and "Archaeology in the Marshall Islands: What Is it All About?" These were prepared under a Congressionally mandated Micronesian Resource Study with the goal of developing databases for FAS preservation offices with support also provided by grants from the Historic Preservation Fund.

For further information, contact Leo Barker, National Park Service, Western Region, 600 Harrison St., Suite 600, San Francisco, CA 94107; telephone (415) 744-3916, FTS 484-3916.

NOTES ... NOTES

Centennial Inspires New ruins Preservation Consortium

In concert with the centennial anniversary of the first documented stabilization work at Case Grande Ruin in southern Arizona, a new preservation society has been proposed. Tentatively called the Ruins Preservation Consortium, this group would provide a forum for information exchange among the disciplines dealing with ruins preservation/stabilization: archeologists, prehistoric and historic architects, soil scientists and chemists, structural engineers, and other preservation practitioners who deal with stone, earthen, mud/adobe, or wooden structures built in the Native American or southwestern Euroamerican traditions.

Potential topics of Society interest include, but are not limited to: (1) aspects of deterioration; (2) "hard science" studies; (3) preservation materials testing; (4) architectural documentation packages/case studies; (5) preservation philosophy, issues, project design and implementation; (6) anthropological studies of architecture, behavior, and proxemics; (7) condition assessments; and (8) training, education, and professional qualifications.

A questionnaire has been developed to help identify the appropriate level of information exchange, i.e., meetings, bulletins, journal, etc., and the necessary dues structure to support such a consortium.

For further information, contact Larry Nordby, Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20007-7127; telephone (202) 343-4101, FTS-343-4101.

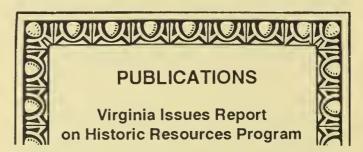
The Past Comes to Life in the National Forests

This summer National Forests across the country will be participating in Passports in Time (PIT), an innovative, interactive program that encourages the public to get involved with the nation's heritage resources. PIT volunteers will work with professional archeologists and historians on projects including excavations of prehistoric Indian sites, historic Army encampments, and early logging camps.

In addition, volunteers may choose to help develop interpretive trails, restore historic structures, work on oral history projects, design public information exhibits and brochures, or take part in an adopt-a-site program. Opportunities will also exist for documentary research, artifact processing, and historical research.

Last year thousands of people visited seven PIT test projects. Again this year projects will be open to the public daily. The public will be invited to see first hand its past being uncovered and to learn more about the heritage of this country.

Volunteer applications for PIT projects are currently being accepted. No experience is necessary. For details on site locations, dates of excavations and directions contact the Passport in Time Clearinghouse, P.O. Box 18364, Washington, DC, 20036; telephone (202) 293-0922.



The December 1990 issue of <u>Footnotes</u> features a "Year End Report" on activities and programs of the Virginia Department of Historic Resources. In Fiscal Year 1989 the Department began an integrated land and underwater archeological survey program, and an investigation to locate sites associated with the Virginia Company Period (1607-1624).

Archeological register activities focused on technical assistance, most importantly to a National Historic Landmark theme study being prepared by the National Park Service on Native American archeological sites of the Contact Period (17th-18th centuries). A Threatened Sites Research Program was created with excavations conducted at five sites. Four of these projects involved public

participation by members of the Archeological Society of Virginia and other volunteers. The staff also organized a symposium for the Society's 50th annual meeting.

Nine of the historic preservation easements accepted during the year protect individually registered landmarks including the Thunderbird archeological site, a National Historic Landmark, in Warren County. The State's Collections Management Program was relocated to an improved curation facility in Richmond during the year. <u>Footnotes</u> is a publication of the Virginia Department of Historic Resources, 221 Governor St., Richmond, VA 23219; telephone (804) 786-3143.

Navajo Nation Launches Quarterly Newsletter

The premier issue of the <u>Navajo Preservation Quarterly</u> appeared January 1991 with Richard M. Begay as editor and Jane King as assistant editor. The newsletter will report on activities of the Archeological Compliance Section of the Navajo National Preservation Department, its Field Services and Navajo Tradition Sections, as well as other news of the Navajo Nation's program to exercise greater control over the preservation of its heritage resources. The <u>Navajo Preservation Quarterly</u> is published by the Navajo Nation Preservation Department, P.O. Box 2898, Window Rock, AZ 86515; telephone (602) 871-6437.

Collections Care Articles

More than 100 articles are available through the Collections Care Information Service. Copies of articles on a variety of topics such as "Procedures for Putting an Object in Storage" and "Museum Lighting," all of interest to cultural resource managers, can be ordered at nominal cost from the National Institute for the Conservation of Cultural Property, Collections Care Information Service, 3299 K St., NW, Washington, DC 20007; telephone (202) 625-1495.

Arkansas Archeological Survey Publishes 1989-90 Annual Report

The <u>Annual Report of the Arkansas Archeological Survey, Fiscal Year 1989-1990</u> was prepared by Hester A. Davis. The 139-page report gives details of activities at eight research stations, computer, teaching, and preservation programs throughout the State, and dissemination of information. Many illustrations depict these and other activities of organization members. Single copies are available, \$6 each plus \$2 postage and handling, from the Arkansas Archeological Survey, Publications Department, P.O.

Box 1249, Fayetteville, AR 72701-1249; telephone (501) 575-3556.

Exxon Publishes 1989 Report On Cultural Resource Rescue

The Exxon Company, U.S.A., has published <u>The 1989 Exxon Valdez Cultural Resource Program</u>, a report on work undertaken to protect cultural resources during shoreline cleanup treatment in Prince William Sound and the Gulf of Alaska following the oil spill that occurred March 24, 1989, when the *Exxon Valdez* struck Bligh Reef in Prince William Sound. Exxon employed 26 archeologists for reconnaissance and protection efforts. This technical report provides background on the area's natural and cultural environments, discusses site protection efforts, and describes the results of the 1989 program.

More than 3,000 miles of shoreline were surveyed, resulting in 271 cultural sites being added to the Alaska Heritage Resource Survey. Constraints on cleanup techniques were devised to minimize disturbance to cultural sites by oil cleanup activities. Collection of jeopardized artifacts was authorized but rarely employed; only 273 artifacts were collected.

According to this report no significant disturbance of cultural sites was caused directly by shoreline oil cleanup efforts, though there was some nonmalicious disturbance such as littering and 16 sites were vandalized. One vandal was apprehended and successfully prosecuted by the Forest Service.

Limited copies of the report are available from Dr. james Haggarty, Exxon Cultural Resources Program, P.O. Box 240409, Anchorage, AK 99524-0409.

Rock Art Symposium Papers

Proceedings from the Symposium on Rock Art Conservation and Preservation held at St. George, UT, during the 14th Annual American Rock Art Research Association (ARARA) Conference have been published. <u>Preserving Our Rock Art Heritage</u>, ARARA's Occasional Paper No. 1, includes keynote speaker Constance Silver's paper, "Rock Art Conservation: Wish or Reality." Other authors included are Nicholas S. Price, Peter J. Pilles, Jr., Ken Hodges, Bruce A. Anderson, Eric W. Ritter, Robert G. Bednarik, Georgia Lee, Louis A. Payen, Charles Cartwright, Robert K. Mark, Evelyn B. Newman, and Stanton Rolf.

Also in this volume are the text of a discussion by a panel of experts on conservation and protection of rock art, and a selected, world-wide bibliography of 170 publications on rock art. To order a copy of <u>Preserving Our Rock Art Heritage</u>, send a check or money order for \$15.50 to cover cost, postage, and handling to Publications, ARARA, P.O. Box 65, San Miguel, CA 93451.

CONFERENCES

EEI to Sponsor CRM Conference

Interested cultural resource management professionals are invited to attend the Fifth National Conference of the Edison Electric Institute's Task Force on Cultural Resource Management to be held Aug. 26-29 in Valley Forge, PA. Senior Anthropologist Dr. David R.M. White of the Southern California Edison Company is chairing the program on the theme "Conserving and Operating Historic Facilities," designed to assist industries and the preservation community in developing appropriate ways to conserve historic resources that are still being economically productive. For further information, contact Joel Mazelis, Edison Electric Institute, 701 Pennsylvania Ave., NW, Washington, DC 20004; telephone (202) 508-5461.



TRAINING OPPORTUNITIES

Focus Is on Archeology In Program Managers' Course

A course to familiarize land managers and program managers with archeology and archeological resources is being sponsored by the Archeological Assistance Division of the National Park Service (NPS) and the University of Nevada-Reno (UN-R). The legal requirements, policies, guidelines, and regulations concerning archeological preservation will be covered and appropriate methods of resource management, development, and operations considered.

This training, open to Federal, State and local managers with little background in archeology who must deal with archeological resources in their jobs, will prepare them to identify problems early and choose the best possible solutions.

This 40-hour course will be held at the Colonial National Historical Park in Yorktown, VA, and include field sessions at an archeological site and a curatorial facility. Tuition fee will be payable to UN-R, and those completing the course will receive UN-R credit as well as a NPS certificate. For details contact Dave Dahlen, Stephen T. Mather Employee Development Center, P.O. Box 77, Harpers Ferry, WV 25425; telephone (304) 535-6215.

COE to Sponsor South Dakota Site Protection/Preservation Workshop

An Archeological Site Protection and Preservation Workshop is scheduled to be held Aug. 12-16, 1991, at the Best Western Ramkota Inn in Pierre, SD, sponsored by the Environmental Impact Research Program of the U.S. Army Engineer Waterways Experiment Station and the U.S. Army Corps of Engineers Omaha District. Specialists in several disciplines will discuss site problems and solutions in fluvial and lakeshore settings, including operational aspects of agency projects. Registration will be limited. Limited applications should be directed to Paul R. Nickens, U.S. Army Engineer Waterways Experiment Station, Attention CEWES-EE-R, 3909 Halls Road, Vicksburg, MS, 39180-6199; telephone (601) 634-2380.

CRM, Archival Photos Courses

The University of Nevada's 40-hour, 1-credit Archaeology for Managers course will be held at the Colonial National Historic Park at Yorktown, VA, July 15-19, 1991. Idaho State Archeologist Dr. Thomas J. Green will be the instructor for this class, which is being offered in cooperation with the Archeological Assistance Division of the National Park Service, for land and program managers whose job functions impact archeological resources.

A View to the Past: How to Photodocument Historic Places, also for one credit, will explore procedures for producing and preserving archival photographs. This technical course will be held Nov. 4-8, 1991, at the Midby-Byron Center in Reno with Colorado State Historian Dr. Frederic J. Athearn as instructor. For registration information, write to Cultural Resources Management, Division of Continuing Education/048, University of Nevada, Reno, NV 89557-0024.

Photography Workshop

Field archeologists, students, volunteer excavation photographers, and interested lay people can develop new skills in a workshop to be held at an **Annapolis excavation July 7-12, 1991**. **Photography in Archaeology**, a summer workshop cosponsored by the Eastman Kodak Co. and Johns Hopkins University School of Continuing Studies, with the cooperation of the Historic Annapolis Foundation, will have Aaron Levin, an archeological photographer with 20 years of excavation experience on 4 continents, as instructor.

The archeologist for the Annapolis excavations, Prof. Mark Leone of the University of Maryland-College Park, will be in his 10th year of digging in the city. Kodak is supplying film, chemicals, paper, and processing for workshop participants. Cost of the workshop is \$400, and students will be responsible for their own living accommodations. For

details, contact the School of Continuing Studies, Johns Hopkins University, 204 Shaffer Hall, Baltimore, MD 21218; telephone 301-338-7428.

University Schedules Cahokia Mounds Field School

This will be the Southern Illinois University's fourth summer at Edwardsville Cahokia Mounds Field School. An Educational Field School class will be held June 24-July 5 for primary and secondary teachers. During the 2-week session an experimental archeological site will be constructed.

A July 8-19 Research Field School class, for credit and noncredit students, will involve a controlled surface collection at the Roach Mound Group area. Information gathered by a variety of methods will be used to interpret the sequence of occupations at this mound group in relation to the growth and decline of the Cahokia site. For registration information, write the Office of Continuing Education, Box 1084, SIUE, Edwardsville, IL 62026-1084; telephone (618) 692-3210 or (314) 621-5168, ext. 3210.

Preservation, Safety Seminars Given in South Carolina

A seminar titled How to Preserve Collections in a Hostile Environment, to help museum, library, and archive staffs control the effects of storage environments on collections, will be held by the Chicora Foundation Sept. 20, 1991, at the Hilton Head Museum on Hilton Head Island, SC. The Foundation also has developed a day-long seminar on fire safety during which museum, library, and archive personnel learn how to fight fires with "hands-on" training using extinguishers. This seminar can be designed to meet specific needs. For additional information on seminars, contact Debi Hacker, Chicora Foundation, Inc., P.O. Box 8664, 861 Arbutus Drive, Columbia, SC 29202; telephone (803) 787-6910.

Resource Protection, Interpretation to Be Subject of Colorado Seminar

A seminar on Issues in the Protection and Interpretation of Archaeological and Cultural Materials has been scheduled by the Interpretive Management Institute in Vail, CO, Sept. 30-Oct.1. Sessions on methods and procedures of resource protection and public interpretation will be held the first day, followed by a day-long field trip to the Denver Museum of Natural History to observe and critique on-going interpretation activities. Intructors will be provided by the Museum, the National Park Service, and the Council for American Indian Interpretation. For details contact Broc Stenman, IMI Coordinator, Mott Training Center, P.O. Box 699, Pacific Grove, CA 93950; telephone (408) 649-2956.

CUMULATIVE IMPACTS of SURFACE MINING (Continued from page 15)

mine area are properly identified and evaluated, and the effects of the mining activities taken into account before mining-related impacts occur.

- (5) Concepts such as the "level of impact" and "region of influence" should be used to assess how the regional resource base would be affected by the loss of a resource, or set of resources, in a mine impact area. APR defines "level of impact" as the number and kinds of environmental consequences expected with an action as compared to existing and future baseline conditions if the action, lignite mining in this case, were not to occur. "Region of influence" is defined as the region within which mine area resources can be compared with known sites to establish their relative importance. APR also recommends the development of a Geographic Information System to construct a quantitative and regional frame of analysis for the assessment of indirect and cumulative impacts on cultural resources.
- (6) Regionally specific archeological and historical overviews should be developed for each lignite area in Texas to document the region of influence, the level and magnitude of impacts from Federal actions, and to assess research directions and the relative importance of resource types.
- (7) EPA should encourage the development of minespecific Cultural Resource Management Plans for the larger mines in Texas with extensive archeological and historical data bases.
- (8) The use of avoidance as a mitigation measure should be balanced with appropriately designed and cost effective data recovery efforts on significant properties to increase public knowledge of archeological and historical records, and also to retrieve important data on worthy research problems to benefit preservation and the scientific disciplines.
- (9) EPA should insure that water level fluctuations, shoreline erosion, and inundation impacts on cultural resources along power plant cooling ponds are identified, evaluated, and taken into account by NPDES mine permit applicants in their assessments of effects.

A final report on this study, titled <u>A Study of the Cumulative Impacts of Lignite Coal Surface Mining to Cultural Resources Resulting from the Issuance of New Source NPDES Permits</u>, 1990, was written by Timothy K. Perttula, Nancy Kenmotsu, and James E. Bruseth. Copies are available from Timothy K. Perttula, Archeologist, Department of Archeological Planning and Review, Texas Historical Commission, P.O. Box 12276, Austin, TX 78711-2276; telephone (512) 463-6096.

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